

A. TITLE

PROCESS FOR APPLYING
ADHESIVE PRODUCT FOR ADHERING ROOFING SHEETS
TO A BUILDING ROOF



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Yet another consideration that is of significance in the use of existing adhesive substance or glues is that when applied to the upper surface of the base roof structure

the adhesive substance usually causes isolated globs or other imperfections

1 in the relative smoothness of the adhesive layering. These globs or imperfections
2 potentially eventually lead to blistering or bubble-like rises which ultimately lessen the
3 adhesive strength the bond between the rubber roof sheets and the base roof
4 structure.

5 Another problem in the use of existing adhesive material for fixing rubber roof
6 sheets to a building structure is the toxicity and environmental aspect. Almost all
7 existing adhesive substances on the market and in use today are comprised of
8 chemicals that are dangerous to the environment and potentially toxic to humans.
9 Because of this latter suspect and the other problems above discussed there is a
10 pressing need for improved adhesive substances in this area.

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D. OBJECTS OF INVENTION

The following are objects of the subject invention:

It is object of the subject invention to provide means to adhere rubber roof sheets to a roof infrastructure.

It is also an object of the invention to provide improved process methods to adhere rubber roof sheets to a roof infrastructure.

An additional object of the subject invention is to provide an improved method of affixing roof sheets to the upper surface of a roof structure.

A further object of the subject invention is to provide an improved process of applying an adhesive material to a roof structure.

Yet another object of the subject invention is to provide an improved roof sheet adhering process that is relatively economical and safe to use from an environmental perspective.

A further object of the subject invention is to provide efficient process and means to adhere roofing sheets to a roof base structure.

Other and further objects of the subject invention can be seen in the following description and claims read in view of the drawings herein.

1 **E. DESCRIPTION OF GENERAL EMBODIMENT AND SUMMARY OF**
2 **INVENTION**

3 The subject invention is a process for applying adhesive product for adhering roof
4 covering sheets to the upper surface of a building, such process comprising applies in
5 the following products in various combination ratios:

6 (a) synthetic rubber and resin;

7 (b) toluene;

8 (c) cyclohexane;

9 (d) dearomatised petrol;

10 With such product being applied by utilizing a spraying device to apply such
11 product in an even layered film and then adhering to the bottom surfaces of a roofing
12 sheet over such applied film. This positioning of the rubber roof sheets is preferably
13 consummated immediately after the application of the adhesive product. Additionally
14 certain other compounds may be added to the above product to minimize the
15 viscosity of the product and render the product more compatible with the
16 environment.

17 In using this general formulation to apply rubber roof sheets or other types of
18 roof sheets to the upper surface of a roof, the product and process above described
19 generates a less viscous adhering substance that can for a given volume of advance
20 can cover, in some situations approximately ten times the surface area that existing
21 adhering products are capable of covering. This aspect therefore means that a given
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1 volumetric unit of the subject product can replace a larger quantity of the existing
2 adhering products to accomplish the same end result if adhering roofing sheets.
3 Additionally, the subject product as applied with the given process, as generally
4 described has a substantially greater adhering capability and strength , with longer
5 lasting adhering effects.

6 Further, in using the subject product there is no necessity to use a high
7 pressure sprayer to apply the adhesive material by reason of a lower viscosity and no
8 need use expensive time consuming procedures to clean the sprayer after each use.
9 Indeed, most low pressure sprayers will be adequate to accomplish the spraying
10 process in applying the subject adherent. Further the adhering substance herein can
11 also be used to spray and coat the insulation material used in the roofing
12 infrastructure in order to protect the integrity thereof. The environmentally
13 compatible aspects are such that the composition is easy to disintegrate into a
14 relatively harmless way into the environment.

15 An additional attribute of this product is that the substance herein dries more
16 quickly without bubbling and as a result the roofing sheets can be applied more
17 quickly so as to render the overall adhesive and installation process more efficient,
18 with the end product having a greater adhesive quality.
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G. DESCRIPTION OF PREFERRED EMBODIMENT

In describing the preferred embodiment of the subject invention it is to be stressed that the following description is only of one specified embodiment of the invention. In so describing a specified embodiment no limitation on the scope of the subject invention will be construed as a result. Further, in describing the subject invention and the components of the adherent substance it is to be understood that the individual components, and specified application process as specifically delineated, may include other compounds, elements or process methods that fall within the same general chemical classification for such specific product. If such substitute substances or process means are not specifically described it shall not limit the scope of the invention and the claims herein.

In the most general form of the embodiment of the subject invention, the product and process in this case involves as stated a formulation as described below:

(a) synthetic rubber and resin	37%
(b) toluene	10%
(c) cyclohexane	29%
(d) dearomatised petrol	24%

It is to be noted that this formulation may vary from the percentages described above. Moreover, this formulation may be enhanced by the addition of various Hydrogen based compounds such as hydrogen sulfide and other certain hydrogen compounds. Additionally, certain nitrogen based compounds are helpful in this formulation. Either or both the hydrogen or nitrogen based compounds contribute to

1 a certain degree to the lower viscosity of the product and its adherent quality is
2 helping to the ultimate adhesive quality of the product, as well lowering the
3 environmental and health problems that are attendant with other existing adhesive
4 products used in this area.

5 In the preferred embodiment, the subject invention comprises the process of
6 applying the following product, or any variant thereof including other compounds
7 hydrogen or nitrogen based compounds, or other additive.

8 (a) synthetic rubber and resin

9 (b) toluene

10 (c) cyclohexane

11 (d) dearomatised petrol

12 Such application herein consummated by a sprayer applying a film of such product
13 over a roof surface and then placing the bottom surface of one or more rubber roof
14 sheets over the upper surface of such film of adhesive material.

1 In summary, the subject invention is a process of applying an adhesive for adhering
2 roofing sheets to a roof surface comprised of spraying an adhesive product comprising:
3 (a) synthetic rubber and resin;
4 (b) toluene;
5 (c) cyclohexane;
6 (d) dearomatised petrol;
7 and after application of such adhesive product for such roof surface, placing the bottom surface of
8 such rubber roof sheets over such roof surface to which such adhesive is applied.

9 In further summary the subject invention is an adherent for roofing sheets comprised in the
10 following ratios of:

11 (a) synthetic rubber and resin	37%
12 (b) toluene	10%
13 (c) cyclohexane	29%
14 (d) dearomatised petrol	24%